



SAFETY DATA SHEET

Creation Date: 21-Jan-2008

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Revision Number: 5

1. Identification

Product Name Fruit Juice/Puree, 6-18 Bx, or Fruit Juice/Puree Concentrate, 40-70 Brix

Catalog Numbers: all relating to juices/purees, or their concentrates; Growers or their customer's numbers

Synonyms Fruit juice, fruit puree, fruit juice concentrate, or fruit puree concentrate, made from any fruit, including Concord grape, Niagara grape, Catawba grape, Fredonia grape, other grapes, apple, blueberry, bilberry, cherry, cranberry, peach, plum, or other fruits.

Recommended Use Blending with water and essence to provide food grade fruit juice or puree.

Uses advised against No information available

Details of the supplier of the safety data sheet

Company	Entity / Business Name	Emergency Telephone Number
Growers Co-operative Grape Juice Co	same	For Information US, call: 716-326-3161
112 North Portage St		Emergency number, US: 716-326-3161
Westfield NY 14787		

2. Hazard(s) identification

Classification Under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Based on available data, the hazard classification criteria are not met for any components of this mixture.

Label Elements

None required

Hazards not otherwise classified (HNOC)

None identified

3. Composition / information on ingredients

Haz/Non-haz

Component	CAS-No	Weight %
Water	7732-18-5	26 - 91
Fructose	57-48-7	2 - 35
Glucose	50-99-7	2 - 30
Sucrose	57-50-1	0 - 30
Tartaric acid	87-69-4	0 - 4
Malic acid	97-67-6	0 - 4
Citric acid	77-92-9	0 - 15

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

Inhalation Get medical attention if symptoms occur.

Ingestion	Give water to drink. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed:	Contacted areas may exhibit irritation
Chronic symptoms:	None expected in normal conditions of use.
Notes to Physician	Food grade material that is potentially concentrated. Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use water spray to cool unopened containers. Cool closed containers exposed to fire with water spray.
Unsuitable Extinguishing Media	none
Flash Point, method	no data available
Autoignition Temperature	no data available
Explosion Limits	
Upper	unlikely to be explosive
Lower	unlikely to be explosive
Sensitivity to Mechanical Impact	unlikely to be sensitive to mechanical impact
Sensitivity to Static Discharge	unlikely to be sensitive to static discharge
Specific Hazards Arising from the Chemical	none known
Hazardous Combustion Products	Carbon monoxide (CO), Carbon dioxide (CO ₂).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

6. Accidental release measures

Personal Precautions	Use personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing.
Environmental Precautions	None known
Methods for Containment, Clean Up	Dilute with water and flush to drain. Dispose of in accordance with local and state regulatory requirements.

7. Handling and storage

Handling	Wash hands before/after breaks and before/after handling product. Avoid contact with eyes, skin, and clothing.
Storage	Keep containers closed in a dry, cool and well-ventilated place. May be stored frozen. May be shipped at ambient temperatures for a few days.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Water	No limits	No limits	No limits	No limits	No limits	No limits
Fructose	No limits	No limits	No limits	No limits	No limits	No limits
Glucose	No limits	No limits	No limits	No limits	No limits	No limits

Sucrose (dry)	TWA: 10 mg/m ³	(Vacated) TWA: 15 mg/m ³ (Vacated) TWA: 5 mg/m ³ TWA: 15 mg/m ³ TWA: 5 mg/m ³	TWA: 10 mg/m ³ TWA: 5 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³ STEL: 20 mg/m ³	TWA: 10 mg/m ³
Tartaric acid	No limits	No limits	No limits	No limits	No limits	No limits
Malic acid	No limits	No limits	No limits	No limits	No limits	No limits
Citric acid	No limits	No limits	No limits	No limits	No limits	No limits

Legend

ACGIH - American Conference of Governmental Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

Engineering Measures

Ensure adequate ventilation and floor drainage. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment**Eye/face Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

9. Physical and chemical properties

Physical State	liquid
Appearance	characteristic of fruit, from yellow to red to purple, water-like to viscous
Odor	fruity, characteristic of the named fruit
Odor Threshold	No information available.
pH	2.5 – 4.0
Melting Point/Range	-25 – 28F/ -32 - -2C
Boiling Point/Range	214 – 217 F/ 101 - 103 C
Flash Point	no data available
Evaporation Rate	no data available
Flammability (solid, gas)	no data available
Flammability or explosive limits	
Upper	no data available
Lower	no data available
Vapor Pressure	no data available
Vapor Density	no data available
Relative Density	1.03 – 1.34
Solubility	Infinitely soluble in water
Partition coefficient; n-octanol/water	no data available (log Pow)
Autoignition Temperature	no data available
Decomposition temperature	No information available.
Viscosity	water-like
Molecular Formula	mixture
Molecular Weight	mixture

10. Stability and reactivity

Reactive Hazard

None known, based on information available.

Stability	Stable under ambient, refrigerated, and freezing conditions.
Conditions to Avoid	Non-food grade environments. Excess heat. Mixing with yeast may lead to fermentation into ethanol
Incompatible Materials	Strong oxidizing agents, strong acids
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO ₂)
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

11. Toxicological information

Acute Toxicity	not acutely toxic
LD50 and LC50 data	no data available, see component data below
Routes of exposure/symptoms, both immediate and delayed effects as well as chronic effects from short and long term exposure:	
Eyes	Contacted areas may exhibit irritation
Skin	Contacted areas may exhibit irritation
Inhalation	No hazard in normal use
Ingestion	This is a food product. May give nourishment if swallowed.
Sensitization	Not likely

Toxicologically Synergistic Products no information available

Component Information

Component	CAS-No	LD50 Oral	LD50 Dermal	LD50 Inhalation
Water	7732-18-5	Not listed	Not listed	Not listed
Fructose	57-48-7	Not listed	Not listed	Not listed
Glucose	50-99-7	25.8 g/kg (rat)	Not listed	Not listed
Sucrose	57-50-1	Not listed	Not listed	Not listed
Tartaric acid	87-69-4	Not listed	Not listed	Not listed
Malic acid	97-67-6	Not listed	Not listed	Not listed
Citric acid	77-92-9	3000 mg/kg (Rat)	Greater than 2 g/kg (rat)	Not listed

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Fructose	57-48-7	Not listed	Not listed	Not listed	Not listed	Not listed
Glucose	50-99-7	Not listed	Not listed	Not listed	Not listed	Not listed
Sucrose	57-50-1	Not listed	Not listed	Not listed	Not listed	Not listed
Tartaric acid	87-69-4	Not listed	Not listed	Not listed	Not listed	Not listed
Malic acid	97-67-6	Not listed	Not listed	Not listed	Not listed	Not listed
Citric acid	77-92-9	Not listed	Not listed	Not listed	Not listed	Not listed

IARC: International Agency for Research on Cancer

NTP: National Toxicology Program

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety & Health Administration

Mexico: Occupational Exposure Limits – Carcinogens

Mutagenic Effects	None known
Reproductive Effects	None known
Developmental Effects	None known
Teratogenicity	None known
Reproductive Effects	None known
STOT (specific target organ toxicity) - single exposure	None known
STOT (specific target organ toxicity) - repeated exposure	None known
Endocrine Disruptor Information	None known
Other Adverse Effects	None known

12. Ecological information

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea	log P(o/w)
Water	No limits	No limits	No limits	No limits	Not listed
Fructose	No limits	No limits	No limits	No limits	Not listed
Glucose	No limits	No limits	No limits	No limits	Not listed
Sucrose	No limits	No limits	No limits	No limits	-3.67
Tartaric acid	No limits	No limits	No limits	EC50=230 mg/L 48h	-1.7
Malic acid	No limits	No limits	No limits	No limits	Not listed
Citric acid	No limits	Leuciscus idus: LC50 = 440-760 mg/L/96h	Photobacteriumphosphoreum: EC50 = 14mg/L/15 min	EC50 = 120 mg/L/72h	-1.72

Persistence and Degradability Bioaccumulation/ Accumulation Mobility

Persistence is unlikely. Soluble in water. Biodegradable.
Does not bioaccumulate
Will likely be mobile in the environment due to its water solubility.
Other adverse effects
None known

13. Disposal considerations

Waste Disposal Methods

Dilute and flush to drain. Dispose of in accordance with local, state, and federal regulations.

14. Transport information

DOT (USA)	Not regulated
TDG (Canada)	Not regulated
IATA (air transport)	Not regulated
IMDG/IMO (maritime)	Not regulated

15. Regulatory information

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINC	NLP	PICCS	ENCS	AICS	IECSC	KECL
Water	X	X	-	231-791-2	-		X	-	X	X	X
Fructose	X	X	-	200-333-3	-		X	X	X	X	X
Glucose	X	X	-	200-075-1	-		X	X	X	X	X
Sucrose	X	X	-	200-334-9	-		X	-	X	X	X
Tartaric acid	X	X	-	201-766-0	-		X	X	X	X	X
Malic acid	X	X	-	202-601-5	-		X	X	X	X	X
Citric acid	X	X	-	201-069-1	-		X	X	X	X	X

Legend: X -Listed

U.S. Federal Regulations

TSCA 12(b)	Not applicable
SARA 313	Not applicable
SARA 311/312 Hazardous Categorization	
Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No
Clean Water Act	Not applicable
Clean Air Act	Not applicable
OSHA Occupational Safety and Health Administration	Not applicable
CERCLA	Not Applicable

California Proposition 65

To the best of our knowledge, this product does not contain any chemicals listed under Proposition 65

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Water	Not listed	Not listed	Not listed	Not listed	Not listed
Fructose	Not listed	Not listed	Not listed	Not listed	Not listed
Glucose	Not listed	Not listed	Not listed	Not listed	Not listed
Sucrose	x	Not listed	x	Not listed	x
Tartaric acid	Not listed	Not listed	Not listed	Not listed	Not listed
Malic acid	Not listed	Not listed	Not listed	Not listed	Not listed
Citric acid	Not listed	Not listed	Not listed	Not listed	Not listed

U.S. Department of Transportation

Reportable Quantity (RQ): not listed
 DOT Marine Pollutant not listed
 DOT Severe Marine Pollutant not listed

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade not listed

Canada This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and this SDS contains all the information required by the CPR.

WHMIS Hazard Class Not controlled

16. Other information

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0

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Revision Date 15-May-2015
Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS